

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An isolated electrical network, comprising:
at least one first power generator coupled to a wind turbine to produce electrical power;
a second generator coupled to an internal combustion engine;
a direct current (dc) bus bar for feeding the generated energy into the network;
a dc device connected to the dc bus bar for detecting the power required in the network;
at least one intermediate storage device for storing electrical energy coupled to the first power generator; and
a controller operable to, in response to the required power in the network being less than power generated by the first power generator, first control power provided by the wind turbine that is delivered to the network; in response to the required power in the network being greater than power generated by the first power generator, second control power provided by the electrical intermediate storage device that is delivered to the network; and in response to the detected power required in the network being greater than the power generated by the first power generator and provided by the electrical intermediate storage device, third control power provided by the second generator coupled to the internal combustion engine that is delivered to the network.
2. (Previously Presented) The isolated electrical network according to claim 1 wherein the first power generator comprises:
a synchronous generator; and

a converter with a dc voltage intermediate circuit with at least one first rectifier and an inverter.

3. (Previously Presented) The isolated electrical network according to claim 1 wherein the electrical intermediate storage device comprises:

at least one electrical element connected to the dc voltage intermediate circuit for feeding electrical energy with dc voltage.

4. (Previously Presented) The isolated electrical network according to claim 3 wherein the electrical element comprises one selected from a group consisting of a photovoltaic element, a mechanical energy storage device, an electrochemical storage device, a capacitor, and a chemical storage device.

5. (Previously Presented) The isolated electrical network according to claim 1, further comprising:

a flywheel, which can be coupled to the second or a third generator.

6. (Previously Presented) The isolated electrical network according to claim 1, further comprising:

a plurality of internal combustion engines each operable to be coupled to a generator.

7. (Canceled)

8. (Currently Amended) The isolated electrical network according to claim 23, further comprising:

a boost/buck converter coupled between the electrical element and the dc voltage intermediate circuit.

9. (Previously Presented) The isolated electrical network according to claim 2, further comprising:

charging/discharging circuits coupled between the electrical storage element and the dc voltage intermediate circuit.

10. (Previously Presented) The isolated electrical network according to claim 1, further comprising:

a flywheel coupled to a generator and a downstream rectifier for supplying electrical energy into the network.

11. (Previously Presented) The isolated electrical network according to claim 1, further comprising:

at least one additional power generator coupled to a corresponding renewable energy source,

wherein all of the power generators using renewable energy sources and the intermediate storage devices power a common dc voltage intermediate circuit.

12. (Previously Presented) The isolated electrical network according to claim 2, wherein the inverter comprises:

a network-commutated inverter.

13. (Previously Presented) The isolated electrical network according to claim 1, further comprising;

an electromagnetic coupling operable to couple the second generator and the internal combustion engine, wherein the energy for operating the electromagnetic coupling is made available by an electrical storage device and/or by a primary power generator.

14. (Previously Presented) The isolated network according to claim 1, further comprising:

a seawater desalination/service water generation plant connected to the isolated electrical network, wherein the generation plant generates service water and drinking water only when the power supplied by the first power generator is greater than the power consumption of the other electrical loads connected to the isolated electrical network.

15. (Previously Presented) The isolated network according to claim 1, further comprising:

a pump storage device operable to receive electrical energy from the first power generator when the power supplied by the first power generator is greater than the power consumption of the other electrical loads connected to the isolated electrical network.

16. (Previously Presented) The isolated electrical network according to claim 1 further comprising:

a synchronous generator is operable as a network generator, wherein the synchronous generator operates in a motor mode with energy required from the first power generator.

17. (Previously Presented) The isolated network according to claim 16 wherein the synchronous generator is connected to the internal combustion engine, and wherein the synchronous generator is deactivated when the electrical power of the first power generator is greater or approximately the same as the electrical power consumption in the isolated electrical network.

18. (Canceled)

19. (Currently Amended) A method for operation control of an isolated electrical network, comprising:

detecting electrical power required in the network with a direct current (dc) device connected to a dc bus bar;

generating electrical power with at least one first generator electrically coupled to the dc bus bar and driven by at least one wind-power station;

first sourcing the network with the at least one first generator driven by the at least one wind-power station when consumption of the electrical power in the network is less than the electrical energy generation capacity of the wind-power station;

second sourcing the network with the at least one first generator driven by the at least one wind-power station and at least one electrical intermediate storage device when consumption of the electrical power in the network is less than the generated electrical power of the first generator and a stored energy capacity of the electrical intermediate storage device; and

third sourcing the network with the at least one first generator driven by the at least one wind-power station, the at least one electrical intermediate storage device, and at least one second generator driven by at least one internal combustion engine when consumption of the electrical power in the network is greater than the generated electrical power of the first generator and the provided power of the electrical intermediate storage device.

20. (Canceled)

21. (Previously Presented) The method according to claim 19, characterized in that the internal combustion engines are provided for driving the at least one second generator, and the internal combustion engines are turned on only when the power delivered by the power generators using renewable energy sources and the electrical intermediate storage devices falls below a predetermined threshold for a predetermined period of time.

22. (Previously Presented) The method according to claim 19, further comprising:

charging the electrical intermediate storage device from the at least one wind-power station when more energy is generated by the at least one wind-power station than is required for the load on the network.

23. (Previously Presented) The method according to claim 19, further comprising:

delivering energy from the electrical intermediate storage device to overcome frequency instabilities or deviations in the network power frequency from its desired value.

24. (Canceled)

25. (Previously Presented) The isolated electrical network according to claim 1, further comprising:

a synchronous generator used as a network generator for a network-commutated inverter for feeding an alternating current into the network, the synchronous generator works in motor operation and a drive of the synchronous generator is realized by providing at least one of energy from a flywheel and by electrical energy from a renewable-energy power generator.

26. (Previously Presented) The isolated electrical network according to claim 1, characterized in that for the case that the output power of the first power generator is greater than the power of the load required in the network, initially electrical energy of the first generator is supplied to the intermediate storage device if the intermediate storage device is not fully charged.

27. (Previously Presented) The isolated electrical network according to claim 1 wherein the first power generator is coupled to a wind-power station.

28. (Previously Presented) The isolated electrical network according to claim 27 wherein the wind-power station is controlled by at least one of a rotational speed of a wind turbine and a position of a blade.

29. (Previously Presented) The isolated electrical network according to claim 1 wherein the intermediate storage device is at least one of an accumulator block type and a battery storage device.